



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: NK-8-2U
 UNIQUE ID NUMBER: 1KK002
 COMBUSTOR:
 ENGINE TYPE: MTF

BYPASS RATIO: 1.2
 PRESSURE RATIO (π_{oo}): 10.8
 RATED THRUST (F_{oo}) (kN): 103.0

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F _{oo} (g/kN) or SN	180.3	305.0		
AS % OF ORIGINAL LIMIT	920.1	258.5		
AS % OF CAEP/2 LIMIT (NO _x)				
AS % OF CAEP/4 LIMIT (NO _x)				
AS % OF CAEP/6 LIMIT (NO _x)				
AS % OF CAEP/8 LIMIT (NO _x)				

DATA STATUS

- PRE-REGULATION
 - CERTIFICATION
 x REVISED (SEE REMARKS)

TEST ENGINE STATUS

- NEWLY MANUFACTURED ENGINES
 - DEDICATED ENGINES TO PRODUCTION STANDARD
 x OTHER (SEE REMARKS)

EMISSIONS STATUS

- DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F _{oo})	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	1.750	2.00	5.00		
CLIMB OUT	85	2.2	1.330	2.00	6.00		
APPROACH	30	4.0	0.550	2.60	13.00		
IDLE	7	26.0	0.220	32.00	64.00		
LTO TOTAL FUEL (kg) or EMISSIONS (g)			724	11824	25102		-
NUMBER OF ENGINES				1	1		
NUMBER OF TESTS				2	2		
AVERAGE D _p /F _{oo} (g/kN) or AVERAGE SN (MAX)				117.1	248.5		
SIGMA (D _p /F _{oo} in g/kN, or SN)							
RANGE (D _p /F _{oo} in g/kN, or SN)							

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	102.7
TEMPERATURE (K)	293
ABS HUMIDITY (kg/kg)	0.00905

FUEL

SPEC	TS-1
H/C	2
AROM (%)	18

MANUFACTURER: KKBM
 TEST ORGANIZATION: State Inst for Civ Aviation
 TEST LOCATION: Sheremetjevo, Moscow
 TEST DATES: 14/06/1990

REMARKS

1. Data obtained on aircraft (Tu-154A)
2. In-service engine(s), tested after overhaul

Compliance with Fuel Venting requirements: - ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)